

CLAIMS

1. A communication method in which at least first and second communication devices are provided and wireless communication is performed between the respective communication devices in accordance with a predetermined communication method, wherein

when a predetermined connection operation is performed in said first communication device, an inquiry message to discover a device to be connected by the wireless communication is wirelessly transmitted after restricting a transmissible distance to a close range;

when a predetermined standby operation is performed in said second communication device, said inquiry message is received and an response message to the received inquiry message is wirelessly transmitted; and

said first communication device performs connection processing with respect to said second communication device, when the response message is received.

2. The communication method according to claim 1, wherein the processing to restrict said transmissible distance to the close range is processing to set transmission power to a limited value compared to the transmission power at the time of normal wireless communication.

3. The communication method according to claim 1, wherein

wireless transmission of the inquiry message by a predetermined connection operation and/or reception of the inquiry message by a predetermined standby operation is performed while operation means provided in the respective communication devices are continuously operated.

4. The communication method according to claim 1, wherein after said connection processing is performed, data transfer processing is performed in accordance with a program which is being executed in the first or the second communication device.

5. The communication method according to claim 1, wherein said second communication device lowers reception sensitivity to the inquiry message, so that only the inquiry message wirelessly transmitted from the close range can be received.

6. The communication method according to claim 1, wherein the connection operation in said first communication device and the standby operation in said second communication device are made to be a common operation, and when the common operation is performed, transmission processing of the inquiry message and reception processing of the inquiry message are alternately performed.

7. The communication method according to claim 1, wherein the connection operation in said first communication device is a limited inquiry message which is distinguishable

from a type of the inquiry message and said second communication device is made to await said limited inquiry message.

8. The communication method according to claim 1, wherein the connection operation in said first communication device is to select a general inquiry message or an arbitrary limited inquiry message, which should be transmitted, and said second communication device is to select the general inquiry message or the arbitrary limited inquiry message, which should be awaited.

9. A communication system in which at least first and second communication devices are provided and wireless communication is performed between respective communication devices by a predetermined communication method, wherein

said first communication device comprises:

communication processing means to perform transmission and reception of a wireless signal

connection operation means, and

control means to make an inquiry message transmitted from said communication processing means in a state in which a transmissible distance is restricted to a close range when said connection operation means is operated and to perform connection processing with respect to a transmission source of the response message when the response message to the inquiry message is received; and

said second communication device comprises:

communication processing means to perform transmission and reception of a wireless signal,

standby operation means, and

control means to make said inquiry message received by said communication processing means when said standby operation means is operated and to make the response message to the received inquiry message wirelessly transmitted by said communication processing means.

10. The communication system according to claim 9, wherein

the processing to restrict the transmissible distance to the close range in said first communication device is processing to set transmission power in said communication processing means to a limited value compared to the transmission power at the time of normal wireless communication.

11. The communication system according to claim 9, wherein

while the connection operation means of said first communication device is continuously operated, the control means of said first communication device makes the inquiry message transmitted; and

while the standby operation means of said second communication device is continuously operated, the control means of said second communication device makes the inquiry message received.

12. The communication system according to claim 9, wherein

when the connection processing is completed by the control means of said first communication device, data transfer processing is performed in accordance with a program which is being executed in the first or second communication device.

13. The communication system according to claim 9, wherein

the communication processing means of said second communication device lowers the reception sensitivity to the inquiry message so that only the inquiry message wirelessly transmitted from the close range can be received.

14. The communication system according to claim 9, wherein

the connection operation means of said first communication device and the standby operation means of said second communication device are made to be a common operation means, and

when the common operation means is operated, the control means of the respective communication devices perform control to make both the transmission processing of the inquiry message and the reception processing of the inquiry message performed alternately by the communication processing means.

15. the communication system according to claim 9, wherein

the inquiry message in said first communication device is a limited inquiry message which is distinguishable from a general inquiry message and said second communication device is made to await said limited inquiry message.

16. the communication system according to claim 9, wherein

the connection operation in said first communication device is to select a general inquiry message or an arbitrary limited inquiry message, which should be transmitted and said second communication device is to select the general inquiry message or the arbitrary limited inquiry message, which should be awaited.

17. A communication device which performs wireless communication with another communication device in accordance with a predetermined communication method, comprising:

communication processing means to perform transmission and reception of a wireless signal;

connection operation means; and

control means to make an inquiry message transmitted from said communication processing means in a state in which a transmissible distance is restricted to a close range when said connection operation means is operated and to perform connection processing with respect to a transmission source of the response message when the response message to the inquiry message is received.

18. The communication device according to claim 17, wherein

the processing to restrict the transmissible distance to the close range is processing to set transmission power in the communication processing means to a limited value compared to the transmission power at the time of normal wireless communication.

19. The communication device according to claim 17, wherein

while said connection operation means is continuously operated, said control means performs processing to make the inquiry message transmitted.

20. The communication device according to claim 17, wherein

when the connection processing is completed by said control means, data transfer processing is performed in accordance with a program which is being executed.

21. The communication device according to claim 17, further comprising:

standby operation means, wherein

when said standby operation means is operated, said control means makes the inquiry message received by said communication processing means and makes the response message to the received inquiry message wirelessly transmitted by said communication processing means.

22. The communication device according to claim 17, further comprising:

standby operation means, wherein

when said standby operation means is operated, said control means makes the inquiry message received by said communication processing means and makes the response message to the received inquiry message wirelessly transmitted by said communication processing means; and

said connection operation means and standby operation means are made to be a common operation means, and

when the common operation means is operated, said control means performs control to make both the transmission processing of the inquiry message and the reception processing of the inquiry message alternately performed by the communication processing means.

23. The communication device according to claim 17, wherein

said connection operation means includes means to select a type of the inquiry message, so that the selected inquiry message of an arbitrary type can be transmitted.

24. A communication device which performs wireless communication with another communication device by a predetermined transmission method, comprising:

communication processing means to perform transmission and reception of a wireless signal;

standby operation means; and

control means to make an inquiry message received by said communication processing means when said standby operation means is operated and to make a response message to the received inquiry message wirelessly transmitted by said communication processing means.

25. The communication device according to claim 24, wherein

while said standby operation means is continuously operated, said control means performs processing to make the inquiry message received.

26. The communication device according to claim 24, wherein

said communication processing means lowers the reception sensitivity to the inquiry message so that only the inquiry message wirelessly transmitted from the close range can be received.

27. The communication device according to claim 24, wherein

said standby operation means includes means to select the inquiry message which should be awaited so that the inquiry message of a selected arbitrary type can be received.